

**SITE INSPECTION TASK WORK PLAN
FOR
QUAIL CREEK LANDFILL
TXD980697205
WA # 25-6JZZ**

EPA Project Manager

Date



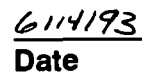
Project Manager



Date



Team Leader



Date

9419742



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1.0 INTRODUCTION

The Fluor Daniel ARCS Team was tasked by the U.S. Environmental Protection Agency (EPA) to develop the Site Inspection Task Work Plan for the Quail Creek Landfill Site (TXD980697205). This site is located in Garland, Dallas County, Texas.

1.1 Site Sampling Inspection Objectives

The Site Inspection (SI) is an intermediate investigation study of the pre-remedial process. It further characterizes the site through the Hazard Ranking System (HRS) documentation. The SI expands on information obtained during the Preliminary Assessment (PA) conducted by the Texas Department of Health (TDH).

The objectives of the site inspection are to describe possible hazardous waste contamination at the site and correlate this to a sampling strategy. The site specific activities and the responsibilities of the field team will also be identified.

1.2 Site Description

The City of Garland Quail Creek Landfill site is an inactive landfill located in Garland, Texas. The site is adjacent to the Union Pacific (formerly Missouri-Kansas-Texas) railroad tracks to the north, Highway 66 to the northwest, Mills Branch (creek) to the south, and Centerville Road to the east. The geographical coordinates of the center of the site are 32°54'19" north latitude and 96°36'24" west longitude (Ref. 1, 2).

The site encompasses 35 to 40 acres (Ref 2). The site is located on two parcels with two different owners; Cambridge Consolidated who owns the majority of the site, and Millcreek Associates Limited Partnership (Ref 4). The total area of these two parcels is over 58 acres (Ref 4). The City of Garland, who leased the property, disposed approximately 73,000 tons of refuse into the landfill from May 1972 to March 1975 (Ref 2). The landfill was exclusively

filled with municipal solid waste, no liquid or hazardous waste was accepted (Ref 2). The landfill had a 2 foot final cover of topsoil applied after disposal activities ceased (Ref. 10). Although the site does not have an engineered liner, the site is noted to have a natural clay liner (Ref 10). No leachate controls, gas extraction, or other landfill controls exist at the site.

The United States Environmental Protection Agency (EPA) identified the City of Garland Quail Creek landfill as a potential Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site upon receipt of the CERCLA "Potential Hazardous Waste Site Identification and Preliminary Assessment" report filed by the TDH on February 24, 1981 (Ref 2). A final strategy determination of "no action needed" was made by the TDH on February 24, 1981 (Ref 3).

Currently the site is vacant. There are no buildings or other structures on-site. The site is densely vegetated (Photolog). Dumping of trash, wood waste, tires, etc. has occurred since site closure; however, there is no indication that dumping of hazardous wastes has occurred. Two monitoring wells were found on the northern edge of the site on it's eastern half (See Figure 2). A third monitoring well was found off-site in the middle of the Union Pacific railroad tracks near the other two wells. It is not known if these monitoring wells have been previously sampled for hazardous constituents. Other physical features of the site include; an intermittent creek that runs North-South through the middle of the site, and a sink hole on the northern side of the site. Site access is limited by a fence on the eastern border of the site with Centerville Road. The western edge of the site is not fenced and easy access can be gained by a dirt road that enters the site from the northwest corner of the site where it borders Commerce Road. This dirt road is used as an access for City of Garland Utility Workers to get to on-site power lines.

The site drains south into Mills Branch which is adjacent to the site. There is no single point of entry (PPE) as this site is adjacent to Mills Branch for over a mile of its length. Overland flow from the site will enter Mills Branch at numerous points along the southern site boundary. Mills Branch drains into Rowlett Creek less than 1 mile from the site. Rowlett Creek then outlets less than 1/2 mile south into Lake Ray Hubbard. Lake Ray Hubbard is used as a main water supply for the City of Dallas. The locations of the drinking water

intakes have not been determined. Lake Ray Hubbard was formed by damming the east fork of the Trinity River. The 15 mile downstream segment ends on the east fork of the Trinity River south of Lake Ray Hubbard. This site is located on properties that are partially within the Mills Branch floodplain (Ref 9); however it has not been determined if the landfill itself is within the 500 year floodplain.

Land use within 1/2 mile of the site includes industrial/public works, residential, undeveloped bottom land, and cemetery. Within 1/2 mile of the site to the northeast is East Garland Road Landfill (TXD980750582). An SI is currently being conducted, by Fluor Daniel, on the East Garland Landfill. An older residential area is within 1/2 mile southwest of the site. There is a residential area currently in development south of Mills Branch from the site. Land use to the north and east of the site is primarily industrial/public works, cemetery and undeveloped land. Land use to the west and northwest of the site is mixed commercial/residential. The industrial/public works businesses north and east of the site may be within 200 feet of the site. No residences, schools, commercial agriculture, or terrestrial sensitive environments are located within 200 feet of the site (Ref 12).

Mills Branch is a small creek that is not believed to be fished or have any other resource uses. Rowlett Creek is fished recreationally, particularly after rains which trigger spawning runs of white bass. There are no known drinking water intakes or other water resource uses along Rowlett Creek from the PPE to it's outlet into Lake Ray Hubbard. Lake Ray Hubbard is fished recreationally. The east fork of the Trinity River south of Lake Ray Hubbard is fished recreationally. There are no known drinking water intakes or other water resource uses along the east fork of the Trinity River from Lake Ray Hubbard to the end of the 15 mile downstream segment.

There are no municipal water wells in the City of Garland (Ref 6). The City of Garland receives its water from Lake Lavon. The City of Garland historically used ground water for its municipal water source; however, ground water has not been used since 1960. All municipal wells were abandoned and filled with sand and concrete. The depth to ground water for these wells (3,200 feet) and ground water temperature discouraged further use (Ref 6).

There are no federal or state designated sensitive environments near the site (Refs 7, 8). No federal or state designated endangered or threatened species are known to exist within 4 miles of the site (Ref 7, 8). The Texas Garter snake is a state Category 2 (under review) species and may inhabit terrestrial areas within 4 miles of the site (Ref 8).

The population surrounding the site is estimated as follows:

0 - 1/4 mile	759
1/4 - 1/2 mile	2,052
1/2 - 1 mile	7,309
1 - 2 miles	25,638
2 - 3 miles	29,348
3 - 4 miles	44,425

The population for the 0 - 1/4 mile ring was determined by a house count during the site reconnaissance (Ref 12). A total of 252 houses were determined to be within 1/4 mile of the site. A housing population density (3.01 persons per house) was determined (Ref 11). The population for the distance rings starting at greater than 1 mile were determined through the use of GEMS (Ref 15). The population for the 1/4-1/2 mile and 1/2-1 mile ring were determined by linearly interpolating the population density from the 0-1/4 mile ring to the 1-2 mile ring.

1.3 Site Specific Objectives

The primary objective of this site inspection is to document the presence, or absence, of hazardous materials both on-site and off-site. An HRS prescore for the site will then be determined. This information will indicate if the site warrants further investigation or if no further action is required.

This sampling plan will address all possible pathways of migration. Ground water samples will be taken from the two on-site monitoring wells to determine migration of contaminants to ground water. Sediment samples will be taken from the surface water pathway to determine potential migration of contaminants. The clay cover in place over the waste interred at this site will be sampled to determine potential exposures from both the soil exposure pathway and air pathway.

2.0 DATA REVIEW AND DATA COLLECTION

All previously collected sampling and non-sampling data are addressed in this section. Proposed data collection activities are also detailed.

No samples are known have been taken from this site at any time that have been analyzed for hazardous constituents. The City of Garland visually inspects this landfill every six months and to date there have been no signs of release (Ref 5).

All data collection activities will be conducted in accordance with the following documents:

- "Final Project Work Plan - Revision 1 for the Site Inspection Project, EPA Region VI, Volume I", June 9, 1992, Fluor Daniel.
- "Original Project Field Sampling Quality Assurance Project Plan for the Site Investigations, Region VI, EPA", July 5, 1992, Fluor Daniel.
- "CLP Users Guide", EPA Region VI, not dated.
- "Original Health and Safety Plan, Site Inspections", June 8, 1992, Fluor Daniel.

There are still many questions and data gaps concerning this site. It is expected that some of the site questions will go unanswered and some data gaps cannot be filled using appropriate references. However, an attempt will be made to answer all data gaps during the sampling event, and through additional contact with the State of Texas and the City of Garland. The list of data gaps is given in Table 1. Proposed sample locations and rationale are listed in Table 2. Figure 3 shows the proposed sample locations.

2.1 Source Waste Characterization

Sample analysis will consist of Target Compound List (TCL) organics and Target Analyte List (TAL) inorganics. The available records do not indicate that there are any particular constituents of concern for this site (Ref 2). Volatile organics are likely to be present through the decomposition of organic materials interred at the landfill. The presence of semivolatiles

is possible from many waste types, including construction wastes. Pesticides and PCBs are of concern because they may have been mixed with other waste types (i.e. construction wastes) disposed at this site. Inorganics may originate from many waste types. Cyanides may be present from plating wastes and other metal processing wastes. However, significant amounts of industrial waste are not believed to be interred at the site.

2.2 Ground Water Migration Pathway

The site is located in the western portion of the East Texas Basin Province. The regional geologic setting is characterized by mixed, thick sequence of terrigenous (sandstone, siltstone, shale) and carbonate (limestone, dolomite) units that appear relatively undeformed. The general orientation of these strata, including the regional fault pattern, is northeast-southwest. The local geological setting is described as the Ozan formation ("lower Taylor marl"), which has a thickness of greater than 500 feet (Ref 13). The native clays have variable permeability and are characterized by moderate to very high shrink-swell (Ref 14). The annual precipitation in the Garland area is approximately 35 inches per year (Ref 15).

This site is built upon an area of clays of variable permeability. The leaching potential from the bottom of the landfill to ground water may be significant. The potential for horizontal migration through the soils may also be significant. The two on-site monitoring wells will be sampled to determine migration of contaminants to ground water.

The City of Garland and adjacent cities rely completely on surface water (Lake Lavon or Lake Ray Hubbard) for domestic water use. No municipal wells are known to exist within 4 miles of the site. There are no known private drinking water wells within 1 mile of the site. Therefore, no drinking water well samples will be taken as part of this SI.

2.3 Surface Water Migration Pathway

The site drains south into Mills Branch which is adjacent to the site. There is no single point of entry as this site is adjacent to Mills Branch for over a mile of its length. Overland flow from the site will enter Mills Branch at numerous points along the southern site boundary. Mills Branch drains into Rowlett Creek less than 1 mile from the site. Rowlett Creek then outlets less than 1/2 mile south, into Lake Ray Hubbard. Lake Ray Hubbard is used as a

main water supply for the City of Dallas and other municipalities. The locations of the drinking water intakes have not been determined. Lake Ray Hubbard was formed by damming the east fork of the Trinity River. The 15 mile downstream segment ends on the east fork of the Trinity River, south of Lake Ray Hubbard. There are no Federal or State designated sensitive environments along the 15 mile downstream segment; however, there may be wetlands along the 15 mile downstream segment.

The sampling plan has been designed to determine the potential migration of materials by sampling soil at the site and sampling sediment at Mills Branch. Since there is no single PPE for the site, the surface water sediment characterization will be accomplished by sampling sediment on the western site boundary (background sample) and eastern site boundary to document a possible release to the surface water pathway.

2.4 Soil Exposure Pathway

Business and public works facilities on the north side of the Union Pacific railroad tracks and across Centerville Road may be located within 200 feet of the site. No residences, schools, day care facilities, or terrestrial sensitive habitats are located within 200 feet of the site (Ref 13). Currently the site is vacant. A dirt road runs on the north edge of the site. This road is believed to be used by City of Garland utility workers to obtain access to on-site power lines. The site has been used for dumping of trash, wood waste, tires, etc. It is likely that the site is used for recreational purposes, such as horseback riding and walking dogs. Soil erosion is limited due to the flat terrain of the site and the site's thick vegetation.

The sampling plan has been designed to characterize the site, and to determine if nearby workers are within 200 feet of observed contamination, by taking soil and sediment samples in the landfill cells. Background soil samples will be taken east and north of the site, in open fields.

2.5 Air Migration Pathway

The site has a 2 foot clay soil cover and is densely vegetated. Therefore, the air pathway risk from non-volatile hazardous compounds is minimal. There was no observed gas release on-site; however, gas formation through waste decomposition must be occurring. Therefore,

samples will be taken in the clay cover to determine what gas constituents are available to the air migration pathway.

3.0 PROJECT MANAGEMENT

Key personnel, level of effort and project schedule are addressed in this section of the report.

The EPA project manager for this site is Mr. Lonnie Ross.

The SI Project Manager for Fluor Daniel is Mr. Jonathan Stewart. Mr. Stewart is responsible for the day-to-day management of all SI tasks associated with the work assignment. He is the key point of contact to the EPA Project Manager.

The Team Leader for Fluor Daniel for the Quail Creek Landfill Site is Mr. William Walters. He will obtain site access, perform the site reconnaissance, prepare the sampling plan, direct field activities and prepare the final report.

Ms. Jean Koeninger will be responsible for coordinating all sample documentation, including the CLP paperwork.

One additional staff member will assist with sampling, decontamination and documentation.

The sampling inspection is scheduled for the week of July 12, 1993.

4.0 REFERENCES

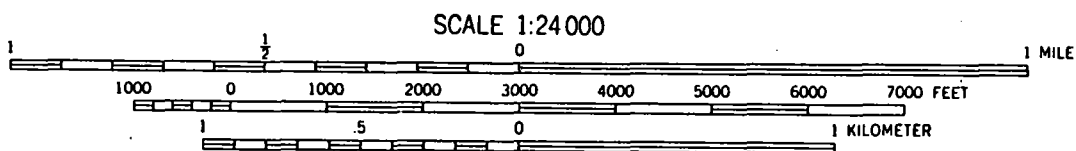
1. U.S. Geological Survey, 7.5 minute topographic map, Rowlett, Tex., 1959 (photorevised 1968 and 1973).
2. Texas Department of Health, "Potential Hazardous Waste Site Identification and Preliminary Assessment", February 24, 1981.
3. Texas Department of Health, "Potential Hazardous Waste Site Final Strategy Determination", February 24, 1981.
4. Record of Telephone Conversations between Tom Casabonne, Fluor Daniel, and the Dallas County Tax Office (various personnel). March 22-30, 1993.

5. Record of Telephone Conversation between Tom Casabonne, Fluor Daniel, and Ken Smith, Landfill Director City of Garland Sanitation Department. March 16, 1993.
6. Record of Telephone Conversation between Josh Sacker, Fluor Daniel, and Jack May, City of Garland Water Department. April 8, 1993.
7. Record of Telephone Conversation between Josh Sacker, Fluor Daniel, and Jeff Reed, U.S. Fish & Wildlife Service Ecological Division. April 7, 1993.
8. Record of Telephone Conversation between Josh Sacker, Fluor Daniel, and Dorinda Sullivan, State of Texas Parks & Wildlife. April 7, 1993.
9. Federal Emergency Management Agency, Flood Insurance Rate Maps, Garland, Texas, Community-Panel Number 485471 0020 D, Map Revised Date August 15, 1990.
10. Record of Telephone Conversation between Tom Casabonne, Fluor Daniel, and Ken Smith, Landfill Director City of Garland Sanitation Department. April 5, 1993.
11. County and City Data Book. U.S. Department of Commerce, Bureau of the Census. Pg 715. 1988.
12. Quail Creek Landfill Reconnaissance Field Notebook. William Walters. 5/12/93.
13. Geologic Atlas of Texas, Dallas Sheet. Bureau of Economic Geology, the University of Texas at Austin. 1972.
14. Soil Survey of Dallas County, Texas. United States Department of Agriculture, Soil Conservation Service. Pgs 25, 27, 28, 29, 36, 78, 144 & 145. February, 1980.
15. Geographic Exposure Modeling System, Census data for the Quail Creek Landfill Site, Garland, Texas. May 13, 1993.

FIGURE 1
SITE LOCATION MAP



NOTE: Topographic Map, Rowlett Quadrangle and Garland Quadrangle. 1959. Photorevised 1968 (Garland 1967) and 1973



QUADRANGLE LOCATION

Location Map Quail Creek Landfill Garland, Texas



FLUOR DANIEL

Figure 1

FIGURE 2
SITE SKETCH

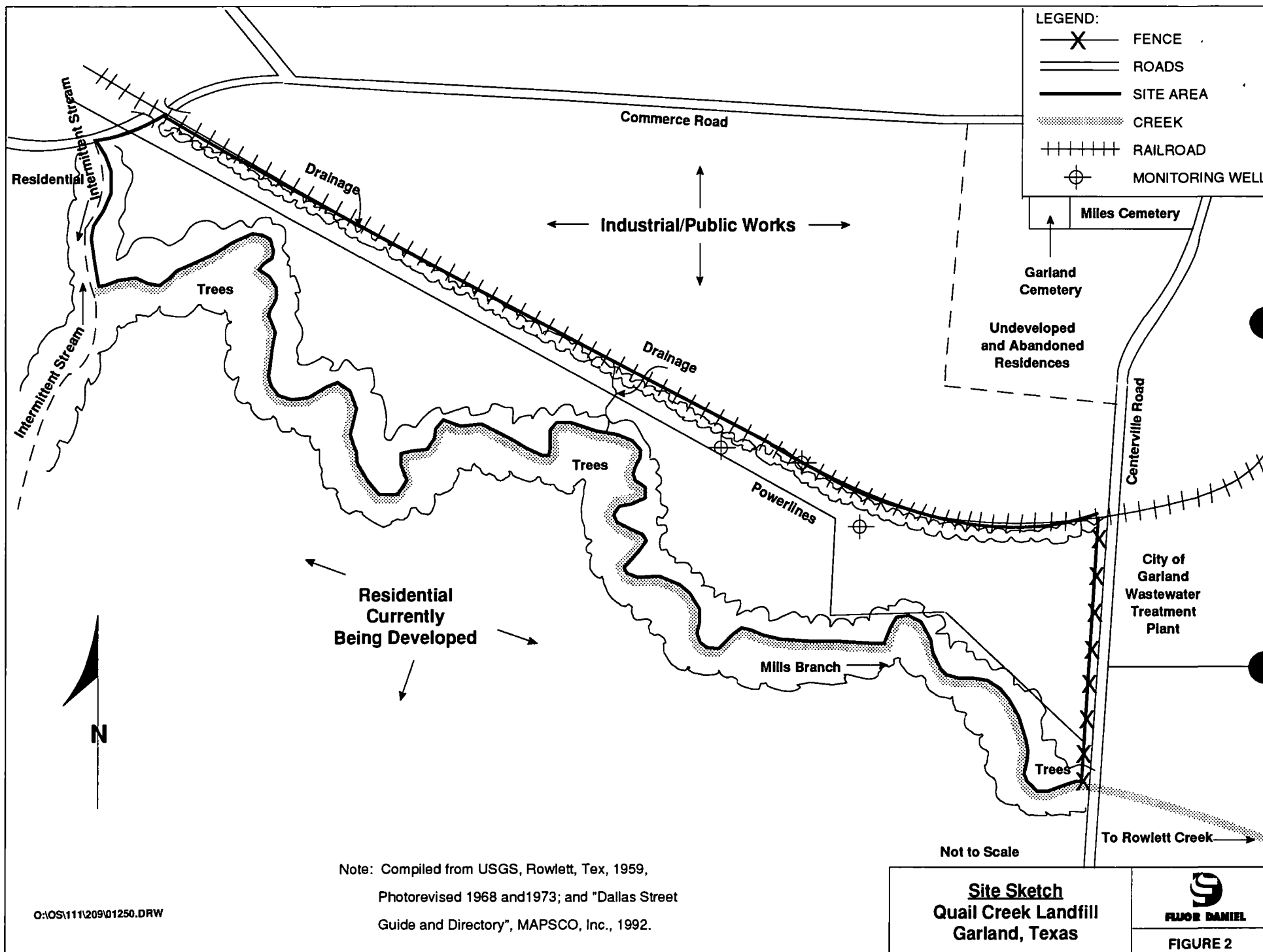


FIGURE 3
SAMPLE LOCATIONS

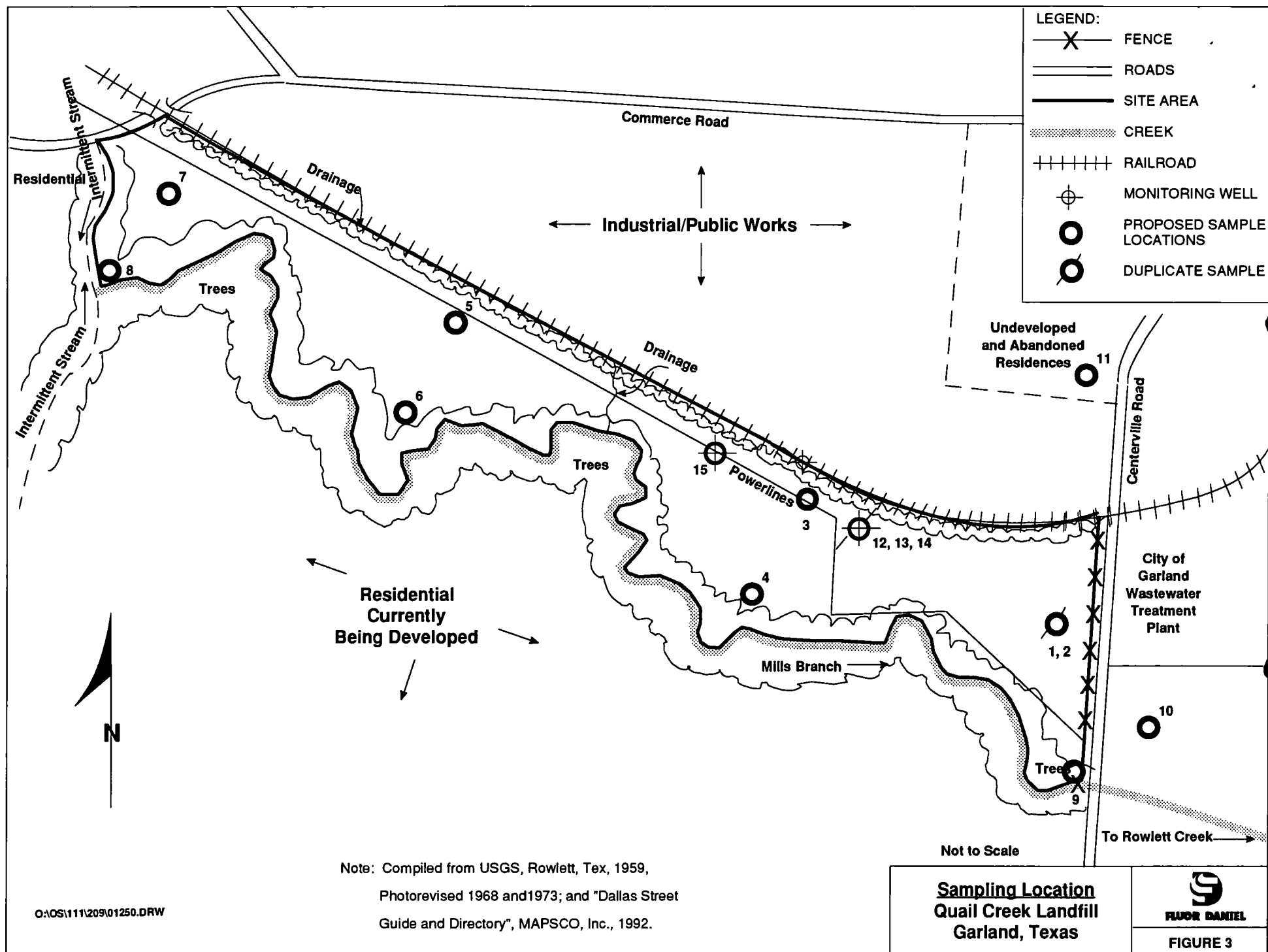


TABLE 1
NON-SAMPLING DATA GAPS

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NON-SAMPLING DATA GAPS

Landfill Data

- What is the depth of the waste?
- Additional site history would be helpful to fully characterize the site (Were there any other historic activities conducted on this site? Has fuel been stored on-site for the earth moving equipment used at the site?).
- Are there any new or proposed state or local regulations that will impact this site? Will the State of Texas or the City of Garland eventually require leachate collection or soil gas extraction?

Ground Water Pathway Data

- Are there any municipal ground water wells within a four mile radius of the site? If any, what population do they serve? How many private wells are within a four mile radius of the site? Are these private wells used as a resource (i.e. for agriculture, livestock, etc.), as potable water, or both?
- What is the depth to ground water? What is depth of aquifers currently being used within 4 miles of the site? What are the aquifer interconnections?
- What is the soil permeability from the surface to the uppermost used or interconnected aquifer? What is the thickness of the least permeable layer?
- Does ground water connect with surface water within 1 mile of the site?
- Who installed the two monitoring wells found on-site during the site reconnaissance? Is there analytical data available from samples taken from these monitoring wells?

TABLE 1 (cont'd)
NON-SAMPLING DATA GAPS

Surface Water Pathway Data

- What is the flow rate of Mills Branch? What is the flow rate of Rowlett Creek? What is the flow rate of the east fork of the Trinity River south of Lake Ray Hubbard? Are there any resource uses for the water from Mills Branch, Rowlett Creek, or the east fork of the Trinity River within the 15 mile downstream segment?
- Is Mills Branch fished? If yes, what is the fish productivity (pounds per year) from the PPE to Rowlett Creek? Is Rowlett Creek fished? If yes, what is the fish productivity from Mills Branch to Lake Ray Hubbard? What is the fish productivity in Lake Ray Hubbard? Is the east fork of the Trinity River fished? If yes, what is the fish productivity in the east fork of the Trinity River from Lake Ray Hubbard to the end of the 15 mile segment?
- What is the total annual surface water and ground water recharge into Lake Ray Hubbard?
- Where are the water intakes located in Lake Ray Hubbard? What population does Lake Ray Hubbard serve? What kind of water treatment is performed on water taken from the lake prior to its distribution? Is there any available water quality data for hazardous constituents?
- What is the total length of wetlands along the surface water pathway?
- Is the site area in the Mills Branch floodplain?

Air Pathway Data

- Is there any direct evidence of biogas release from the landfill?
- What is the acreage of wetlands within a 4 mile radius of the site?

TABLE 2
SAMPLING LOCATIONS AND RATIONALE

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SAMPLING LOCATIONS AND RATIONALE

Sample 1

Low concentration soil sample: Collected from the landfill cell on eastern side of the site near its border with Centerville Road. This is also the QA/QC soil sample.

Rationale: To determine potential contamination on-site (source characterization). Also, to help determine the quality control of the analyses performed on the soil samples taken as part of this SI.

Sample 2

Low concentration soil sample: Duplicate of Sample 1.

Rationale: To determine potential contamination on-site (source characterization). Also, to help determine the quality control of the analyses performed on the soil samples taken as part of this SI.

Sample 3

Low concentration soil sample: Collected from the landfill cell at the northern end of the site between the two on-site monitoring wells.

Rationale: To determine potential contamination on-site (source characterization).

Sample 4

Low concentration soil sample: Collected from the landfill cell at the southern end of the site, south of Sample 3.

Rationale: To determine potential contamination on-site (source characterization).

Sample 5

Low concentration soil sample: Collected from the landfill cell on the north side of the site, approximately 600 feet west of the intermittent stream that runs north-south through the middle of the site.

Rationale: To determine potential contamination on-site (source characterization).

Sample 6

Low concentration soil sample: Collected from the landfill cell on the south side of the site, approximately 600 feet west of the intermittent stream that runs north-south through the middle of the site.

Rationale: To determine potential contamination on-site (source characterization).

Sample 7

Low concentration soil sample: Collected from the landfill cell on the western side of the site, approximately 300 feet southwest of Commerce Road.

Rationale: To determine potential contamination on-site (source characterization).

TABLE 2 (cont'd)
SAMPLING LOCATIONS AND RATIONALE

Sample 8

Low concentration soil/sediment sample: Collected from the northern bank of Mills Branch on its western (upstream) border with the site.

Rationale: To document background soil/sediment concentrations.

Sample 9

Low concentration soil/sediment sample: Collected from the northern bank of Mills Branch on its eastern (downstream) border with the site.

Rationale: To document possible observed release to the surface water.

Sample 10

Low concentration soil sample: Collected from a field across Centerville Road and between the City of Garland water treatment plant on the north and Mills Branch on the south.

Rationale: To document background soil concentrations.

Sample 11

Low concentration soil sample: Collected from a field north of the site, south of Miles Cemetery and west of Centerville Road.

Rationale: To document background soil concentrations.

Sample 12

Low concentration ground water sample: Collected from the eastern monitoring well that was found during the site reconnaissance. This well is located adjacent to the dirt road on the north side of the site between Centerville Road and west of the intermittent stream that runs north-south through the middle of the site.

Rationale: To document possible observed release to the ground water.

Sample 13

Low concentration ground water sample: Duplicate of Sample 12. This sample will also be the QA/QC ground water sample.

Rationale: To document possible observed release to the ground water and to help determine the quality control of the analyses performed on the ground water samples taken as part of this SI.

TABLE 2 (cont'd)
SAMPLING LOCATIONS AND RATIONALE

Sample 14

Trip blank: Taken at the same location as Samples 12 and 13.

Rationale: To help determine the quality control of the analyses performed on the ground water samples taken as part of this SI.

Sample 15

Low concentration ground water sample: Collected from the western monitoring well that was found during the site reconnaissance. This well is located adjacent to the dirt road on the north side of the site between Centerville Road and west of the intermittent stream that runs north-south through the middle of the site.

Rationale: To document possible observed release to the ground water.

ATTACHMENT 1
ADDENDUM TO THE GENERIC HEALTH AND SAFETY PLAN

**ADDENDUM TO GENERIC HEALTH AND SAFETY PLAN
FOR SITE INSPECTION
QUAIL CREEK LANDFILL, TXD980697205
WA # 25-6JZZ**

1.0 INTRODUCTION

The purpose of this addendum is to identify specific hazards, set action levels, define the levels of protection and to complete emergency response information for reconnaissance and sampling activities at the Quail Creek Landfill Site in Garland, Texas.

2.0 SITE DESCRIPTION

The Quail Creek Landfill Site is an inactive sanitary landfill located in Garland between the UP (formerly M.K.&T.) Railroad tracks on the north and Mills Branch (creek) on the south. The geographical coordinates of the center of the site are North 32°54'19" latitude and West 96°36'24" longitude.

The site encompasses approximately 35-40 acres. The City of Garland disposed of approximately 73000 tons of municipal solid waste into the landfill from May 1972 to March 1975. Only municipal solid waste was accepted at the site, no liquid or hazardous waste was accepted. Two feet of final cover was added to the surface of the landfill at the time of closure. No landfill controls, such as leachate collection or soil gas extraction are known to exist at this site. Two monitoring wells are known to exist on-site.

The site is currently vacant. There are no buildings or other structures on-site. The site is highly vegetated and a considerable amount of illegal dumping (wood waste, tires, garbage, etc.) has occurred on-site. The site access is limited by a fence along the Centerville Road border of the site. No other site fencing exists to limit site access. A dirt road exists on the north border of the site and has an unfenced outlet on the northwest corner of the site.

The site drains south into Mills Branch which is adjacent to the site. Mills Branch drains into Rowlett Creek less than 1 mile from the probable point of entry (PPE). Rowlett Creek then outlets, less than 1/2 mile south, into Lake Ray Hubbard. Lake Ray Hubbard is used as a main water supply for the City of Dallas and other municipalities. Lake Ray Hubbard was formed by damming the east fork of the Trinity River. The 15 mile downstream segment ends on the east fork of the Trinity River south of Lake Ray Hubbard.

3.0 HAZARDS

The following sections will describe, based on available information, the chemical and physical hazards associated with this site.

3.1 Chemical Hazards

This site has not been previously sampled; therefore no data exists to determine contaminants of concern. Two feet of final cover was placed upon the surface of the landfill as part of the site closure. This cover suggests that the chemical exposure hazards will be minimal. However, proper protective equipment will be used to minimize chemical exposure.

3.2 Physical Hazards

The physical hazards are heat stress; and trip/fall hazards. Control of heat stress injuries is described in the appendix of the generic HASP. Severe injuries could occur due to trip/fall hazards on this site. Another hazard that may be encountered at this site is poisonous snakes (rattlesnakes or cottonmouths) and fire ants.

4.0 MONITORING

There is no information to suggest that any particular hazardous constituent exists at the site. The vegetation at the site will severely limit the potential of airborne solids, but there is the potential for volatile organics to be released during the sampling investigation. Therefore, HNu monitoring will be performed to determine if volatile organic hazards may be present.

5.0 PERSONAL PROTECTIVE EQUIPMENT

Workers entering a potentially contaminated area must have protective equipment available for use. Since the existence, types, and concentration of hazardous constituents are not known for this site the level of protection that is required to be available will be Level C Protection and will consist of the following:

- Full face air purifying respirator with a high efficiency particulate filter and protection from acid gases and organic vapors;
- A 10-minute escape pack for each sampler;
- Polyethylene coated Tyvek with hood;
- Inner latex gloves;
- Outer nitrile gloves;
- Chemically resistant boots with steel toe/steel shank; and
- Hard hats.

The Tyvek coveralls, if used, will be taped at the wrists and ankles.

Due to this site being a closed municipal landfill that did not accept large quantities of liquid or hazardous wastes, the level of protection that is assumed to be necessary is Level D. The Site Task Leader will determine whether an upgrade to Level C is necessary during the sampling inspection, by the results of the HNu monitoring.

Decontamination procedures are defined in the body of the generic HASP and in the sampling plan.

6.0 EMERGENCY PROCEDURES

In the event an emergency situation arises, such as injury, illness, or fire, the appropriate immediate response must be taken by the first person to recognize the situation.

First aid equipment and an emergency eye wash unit will be available on-site. Should a worker be so severely injured that decontamination is not possible, the ambulance crew and hospital will be so notified.

A list of emergency contacts are provided below in order of contact. A route map and verbal route description to the hospital is attached to this addendum and will be posted at the site.

Police, Fire, or Ambulance

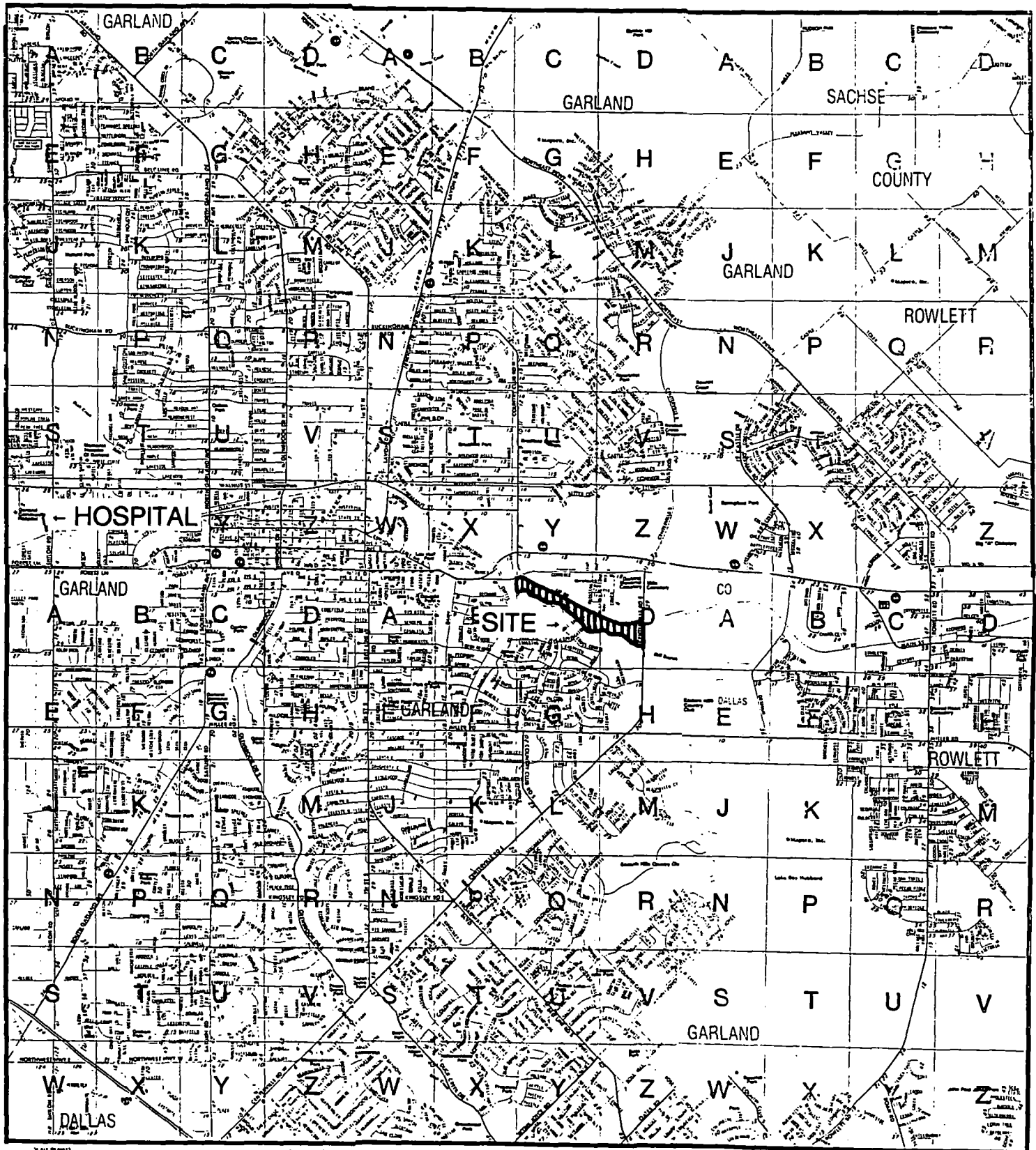
911

Fluor Daniel Health and Safety Manager

(214) 450-4100

EPA Work Assignment Manager

(214) 655-8374



From Quail Creek Site:

Take Centerville Rd. north and travel approximately 0.5 miles. Turn left (west) on State Highway 66 and proceed for approximately 0.8 miles then turn right (north) on Country Club Rd. Go approximately 0.3 miles then turn left (west) on Walnut St. Proceed on Walnut St. for approximately 3.2 miles then turn left (south) on King St. Garland Community Hospital will be at the end of the driveway. (Alternative hospital is the Memorial Hospital of Garland. Directions are identical through Walnut. Go 2.8 miles on Walnut. Turn right [north] onto Clara Barton and go 0.15 miles to Marie Curie. Memorial Hospital is on the northeast side of the intersection.)

ATTACHMENT 2
BACKGROUND/SAMPLE STRATEGY

BACKGROUND/SAMPLE STRATEGY

Site: Quail Creek Landfill **Conducted By:** W. Walters
Location: Garland, Texas **Project Manager:** J. Stewart
Tentative field date: Recon 5/12/93 **Sampling** 7/12-7/16/93

PART I

Site Description (size, structures, extent of pavement)

The Quail Creek landfill is a closed municipal landfill used by the City of Garland. The former working area of the landfill is approximately 35-40 acres in size. A total of 73,000 tons of waste were disposed of in this landfill. The site is almost entirely covered in vegetation. No structures or pavement exist on-site. A dirt road runs along the north edge of the site.

Site Activity (years, processes, waste, disposal practices)

Past: This landfill, which only accepted municipal solid wastes,
operated between May 1972 and March 1975.

Present: The landfill is currently sitting vacant.

Previous Sampling?	YES	NO	COMMENT
Groundwater	0	X	Monitoring wells exist but no sampling is known to have occurred.
Soil/Sediment	0	X	
Other	0	X	
Have any results been obtained? (Attach on separate page)	0	X	
Did sample analysis include QC/BKGD?	0	X	
Has any remediation occurred?	0	X	
Will samples be collected?	X	0	

**BACKGROUND/SAMPLE STRATEGY
PART II**

Sample Summary and Rationale

<u>MATRIX</u>	<u># OF SAMPLES</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>GRAB/COMP.</u>
Soil	7	On-Site	Surface	Grab
Soil	2	Off-Site	Surface	Grab
Sediment	2	Off-Site	Surface	Grab
Groundwater	3	On-Site	TBD	Grab
Trip blank	1			

Sample Analysis

<u>MATRIX</u>	<u>ANALYSIS</u>						<u>OTHER</u>
			<u>VOA</u>	<u>SEMI</u>	<u>PCB/PEST</u>	<u>INORG.</u>	
Soil/Sediment	X	CLP	X	X	X	X	<u>Cyanides</u>
Groundwater	X	CLP	X	X	X	X	<u>Cyanides</u>
	O	CLP	O	O	O	O	_____
	O	CLP	O	O	O	O	_____

COMMENTS: Ten samples will be taken on-site, and four will be taken off-site. Two of the off-site samples are sediment samples along the surface water pathway and two others are background samples (note: on-site is defined as directly on top of areas of waste disposal). Three samples will be from on-site ground water monitoring wells. Additionally, a trip blank is required to be taken.

ATTACHMENT 3
PHOTOLOG

Photo No.

1



Site Name:

Quail Creek Landfill

CERCLIS # TXD980697205

Location:

Garland, Texas

Project #: WA #25-6JZZ

Photographer/Witness

WW WP
William Walters/William Park

Date 5/12/93

Time Afternoon

Direction West

Description

Panoramic from the eastern border of the site with Centerville Road.

(Note: due to the extreme length of the site this photo only shows a small area of the site.)

Page 1

of 3

Photo No.

2



Site Name:

Quail Creek Landfill

CERCLIS # TXD980697205

Photographer/Witness

William Walters/William Park *WW*

Location:

Date

5/12/93

Time Afternoon

Direction South

Garland, Texas

Description

Photo of extreme west side of site taken from the northwest corner of the site. Dumped materials visible in foreground.

Project #:

WA #25-6JZZ

Photo No.

3



Page 2

Of 3

Photographer/Witness

William Walters/Keith Westberry *KW*

Date

5/11/93 *WW*

Time Morning

Direction South

Description

Photo of center area of landfill taken from northside. Dumped tires can be seen in the center of the photo.

Photo No.

4



Site Name:

Quail Creek Landfill

CERCLIS # TXD980697205

Photographer/Witness

William Walters/William Park

Location:

Date

5/12/93

Time Afternoon

Direction West

Garland, Texas

Description

Photo of Mills Branch from Centerville Road Bridge.

Project #:

WA #25-6JZZ

ATTACHMENT 4
CLP SAMPLE REQUEST FORM

ATTACHMENT 5
EVALUATION CHECKLIST

EVALUATION CHECKLIST

NOTE: Information must be referenced; attach a list of references.

Site Name: Quail Creek Landfill, City of Garland
TDD No.: TXD980697205
Reference No.: _____

1. SOURCE AREAS, CONTAINMENT, WASTE QUANTITY

Complete the following for each area where hazardous substances have been deposited, stored, disposed of, or placed, plus those soils that have become contaminated from migration of a hazardous substance.
(refer to Table 1, and Tables 2-5, 3-2, 4-2, 6-3 and 6-9)

<u>Source Area</u>	<u>Containment</u>	<u>Waste Quantity</u>
<u>Landfill</u>	<u>2 feet of soil cover</u>	<u>73,000 tons</u>
_____	<u>(Ref 1)</u>	<u>(Ref 2)</u>
_____	_____	_____
_____	_____	_____

2. AVAILABLE ANALYTICAL DATA

For the media listed below, note if there is a documented observed release or the potential to release to that media. An observed is noted if a hazardous substance is detected at three times the background sample concentration or background sample quantitation limit. A potential to release is noted if wastes were disposed of in a source area which would allow contaminant migration. (refer to PA Data and Rescoring Record Table for additional criteria).

<u>Media</u>	<u>Potential to Release</u>	<u>Observed Release</u>	<u>Comments</u>
Groundwater	<u>X</u>	_____	_____
Surface Water	<u>X</u>	_____	_____
Sediment	<u>X</u>	_____	_____
Soil < 2 feet deep	<u>X</u>	_____	_____
Soil > 2 feet deep	<u>X</u>	_____	_____
Air	<u>X</u>	_____	_____
Other (specify, e.g., sludge, source)	_____	_____	_____

3. GROUNDWATER PATHWAY

A. Population served by private wells or drinking water supplies within the designated area rings. Note if the water supplies within that ring are private (P), community (C) or both (B). (reference with water supply distribution maps and topographic maps using the average county population density)

<u>Distance</u> (miles)	<u>Population</u>	<u>Type of Supply (P.C. or B)</u>
0 - 1/4	TBD	
1/4 to 1/2	TBD	
1/2 to 1	TBD	
1 to 2	TBD	
2 to 3	TBD	
3 to 4	TBD	

B. Are any of the supplies to the population noted above contaminated? ☐ Yes ☐ No ☒ To be determined

If yes:

- What is the location of the well? _____
- What are the contaminants detected? _____
- Are any health-based benchmarks exceeded (e.g., MCLs)?
☐ Yes ☐ No

C. What is the distance to the nearest drinking water well?
TBD miles

D. What is the depth to groundwater on the property?
TBD feet

4. SURFACE WATER PATHWAY

A. Identify the surface water bodies and flow rates (cubic feet per second, cfs) along a 15 stream-mile pathway. Identify the uses of each surface water body as:

- DW = drinking water
- I = irrigation of commercial food crops or commercial forage crops
- L = watering of commercial livestock
- FP = ingredient in commercial food preparation
- R = major or designated recreation area
- F = fishery

<u>Surface Water Body</u>	<u>cfs</u>	<u>Use(s)</u>
<u>Mills Branch</u>	<u>TBD</u>	<u>TBD</u>
<u>Rowlett Creek</u>	<u>TBD</u>	<u>F</u>
<u>Lake Ray Hubbard</u>	<u>n/a</u>	<u>DW, I, L, FP, R, F</u>
<u>Trinity River (east fork)</u>	<u>TBD</u>	<u>F</u>

B. Identify the population served by surface water intakes along the 15 stream-mile pathway.

<u>Surface Water Body</u>	<u>cfs</u>	<u>Use(s)</u>
<u>Lake Ray Hubbard</u>	<u>n/a</u>	<u></u>

C. Are any of the intakes to the population noted above contaminated? Yes X No

If yes:

- What is the location of the intake?
- What are the contaminants detected?
- Are any health-based benchmarks exceeded (e.g., MCLs)?
 Yes No

D. Are there any fisheries along the 15 stream-mile pathway that are contaminated? Yes X No

If yes:

- What is the location of the fishery?
- What are the contaminants detected?
- Are any health-based benchmarks exceeded (e.g., MCLs)?
 Yes No

E. Identify sensitive environments noted on PA Table 5, along the 15 stream-mile pathway and note the surface water body it is on.

<u>Sensitive Environment</u>	<u>Surface Water Body</u>
<u>None (Ref 3,4)</u>	<u></u>

F. Are there any sensitive environments along the 15 stream-mile pathway that are contaminated? Yes No

If yes:

- What is the location of the sensitive environment?
- What are the contaminants detected?

G. What is the distance to nearest surface water body?
<100 feet (Mills Branch, Ref 5)

H. What is the flood frequency of the nearest surface water body? TBD years

5. SOIL EXPOSURE PATHWAY

A. What is the number of people who reside on the property or within 200 feet of contamination who occupy a residence, attend a school, or attend a day care center? 0 (Ref 6)

B. What is the number of workers on the property and at a workplace within 200 feet of contamination? TBD

6. AIR PATHWAY

A. Population residing within the designated area rings. (reference with topographic maps using the average county population density for populations from 0 to 1/2 mile, and with GEMS for 1/2 to 4 miles)

<u>Distance (miles)</u>	<u>Population</u>
0 - 1/4	<u>759 (Ref 6, 7)</u>
1/4 to 1/2	<u>2,052 (interp. Ref 6, Ref 8)</u>
1/2 to 1	<u>7,309 (interp. Ref 6, Ref 8)</u>
1 to 2	<u>25,638 (Ref 8)</u>
2 to 3	<u>29,348 (Ref 8)</u>
3 to 4	<u>44,425 (Ref 8)</u>

B. Determine the wetland acreage for the following rings:

<u>Distance (miles)</u>	<u>Total Wetland Acreage</u>
0 - 1/4	<u>TBD</u>
1/4 to 1/2	<u>TBD</u>
1/2 to 1	<u>TBD</u>

References

1. Record of Telephone Conversation between Tom Casabonne, Fluor Daniel, and Ken Smith, Landfill Director City of Garland Sanitation Department. April 5, 1993.
2. Texas Department of Health, "Potential Hazardous Waste Site Identification and Preliminary Assessment", February 20 1981.
3. Record of Telephone Conversation between Josh Sacker, Fluor Daniel, and Jeff Reed, U.S. Fish & Wildlife Service Ecological Division. April 7, 1993.
4. Record of Telephone Conversation between Josh Sacker, Fluor Daniel, and Dorinda Sullivan, State of Texas Parks & Wildlife. April 7, 1993.
5. U.S. Geological Survey, 7.5 minute topographic map, Rowlett, Tex., 1959 (photorevised 1968 and 1973).
6. Quail Creek Landfill Reconnaissance Field Notebook. William Walters. 5/12/93.
7. County and City Data Book. U.S. Department of Commerce, Bureau of the Census. Pg 715. 1988.
8. Geographic Exposure Modeling System, Census data for the Quail Creek Landfill Site, Garland, Texas. May 13, 1993.